

## CLAIMS

What is claimed is:

1. A method for formatting space on a storage device for a database system, the method comprising the steps of:

- (a) formatting a first increment in the storage device for creating a database file; and
- (b) asynchronously formatting at least one subsequent increment in the storage device for the database file as a concurrent task of the database system.

2. The method of claim 1 wherein the concurrent task is a background process.

3. The method of claim 1 wherein the asynchronously formatting step (b) further includes the step of:

- (b1) formatting the at least one subsequent increment for the database file as a background process when occupation of a previous increment has reached a threshold.

4. The method of claim 3 wherein the previous increment has a threshold of one-half.

5. The method of claim 1 wherein the asynchronously formatting step (b) further includes the step of:

- (b1) formatting the at least one subsequent increment for the database as a

background process when data is first stored in a previous increment.

6. The method of claim 1 wherein the asynchronously formatting step (b) further includes the step of:

(b1) continuously formatting the at least one subsequent increment for the database as a background process.

7. A method for formatting space in a storage device for a database system, the method comprising the steps of:

- (a) formatting a first increment in the storage device for creating a database file;
- (b) triggering the database system to asynchronously format at least one subsequent increment; and
- (c) asynchronously formatting at least one subsequent increment for the database file as a concurrent task.

8. The method of claim 7 wherein the concurrent task is a background process.

9. A computer-readable medium containing a program for formatting space in a storage device for a database system, the program including instructions for:

- (a) formatting a first increment in the storage device for creating a database file; and
- (b) asynchronously formatting at least one subsequent increment in the storage device for the database file as a concurrent task of the database system.

1           10.   The computer-readable medium of claim 9 wherein the concurrent task is a  
2 background process.

1           11.   The computer-readable medium of claim 9 wherein the asynchronously  
2 formatting instruction (b) further includes instructions for:

3           (b1)   formatting the at least one subsequent increment for the database file as a  
4 background process when occupation of a previous increment has reached a threshold.

1           12.   The computer-readable medium of claim 11 wherein the previous increment  
2 has a threshold of one-half.

1           13.   The computer-readable medium of claim 9 wherein the asynchronously  
2 formatting instruction (b) further includes instructions for:

3           (b1)   formatting the at least one subsequent increment for the database as a  
4 background process when data is first stored in a previous increment.

1           14.   The computer-readable medium of claim 9 wherein the asynchronously  
2 formatting instruction (b) further includes instructions for:

3           (b1)   continuously formatting the at least one subsequent increment for the  
4 database as a background process.

1           15.   A computer-readable medium for formatting space in a storage device for a  
2 database system, the method comprising the steps of:

- 3 (a) formatting a first increment in the storage device for creating a database file;  
4 (b) triggering the database system to asynchronously format at least one  
5 subsequent increment; and  
6 (c) asynchronously formatting at least one subsequent increment for the database  
7 file as a concurrent task.

1 16. The computer-readable medium of claim 15 wherein the concurrent task is a  
2 background process.

1 17. A computer system for storing and retrieving data, the computer system  
2 comprising:  
3 a storage device for archiving the data;  
4 a database system coupled with the storage device, to control storing and retrieving  
5 the data, the database system including a formatting block for formatting a first increment of  
6 the storage device to store a portion of a database file and for asynchronously formatting at  
7 least one subsequent increment in the storage device for the database file as a concurrent  
8 task of the database system.

1 18. The computer system of claim 17 wherein the concurrent task is a  
2 background process.

1 19. The computer system of claim 17 wherein the formatting block  
2 asynchronously formats the at least one subsequent increment by formatting the at least one

subsequent increment for the database file as a background process when occupation of a previous increment has reached a threshold.

sub 20. The computer system of claim 17 wherein the previous increment has a threshold of one-half.

21. The computer system of claim 17 wherein the formatting block asynchronously formats the at least one subsequent increment by formatting the at least one subsequent increment for the database as a background process when data is first stored in a previous increment.

22. The computer system of claim 17 wherein the formatting block asynchronously formats the at least one subsequent increment by continuously formatting the at least one subsequent increment for the database as a background process.

23. A computer system storing and retrieving data, the computer system comprising:

- a storage device for archiving the data; and
- a database system coupled with the storage device, for storing and retrieving the data, the database system including a formatting block for formatting a first increment in the storage device for creating a database file, triggering the database system to asynchronously format at least one subsequent increment, and asynchronously formatting at least one subsequent increment for the database file as a concurrent task.

